





### Features

- Universal AC input / Full range
- · 2 pole EURO plug
- Medical safety approved (2 x MOPP between primary to secondary)
- · Suitable for BF application with appropriate system consideration
- Low leakage current <50μA</li>
- No load power consumption<0.3W</li>
- Energy efficiency Level V
- · Comply with EU ErP
- · Class II power (without earth pin)
- · Protections: Short circuit / Overload / Over voltage
- · Fully enclosed plastic case
- Optional lock type DC plug
- · 100% full load burn-in test
- 3 years warranty

## Applications

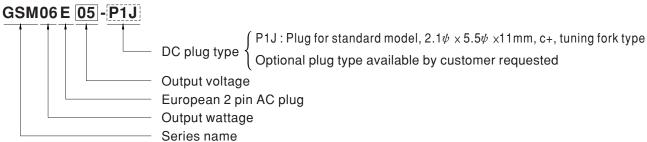
- · Blood glucose meter
- · Blood pressure meter
- Nebulizer
- Inhaler
- · Portable medical device

## Description

GSM06E is a highly reliable, 6W wall-mounted style single-output green medical adaptor series. This product is equipped with a 2-pin (no FG) standard European power plug, adopting the input range from 85VAC to 264VAC. The entire series supplies different output voltages between 5VDC and 24VDC that can satisfy the demands for various kinds of miniature medical devices. The circuitry design meets the international medical standards (2 x MOPP), having an ultra low leakage current (<50 $\mu$ A), fitting the medical devices in direct electrical contact with the patients.

With the efficiency up to 82% and the extreme low no-load power consumption below 0.3W. GSM06E is compliant with EU ErP. The supreme feature allows the adaptor to save the energy when it is either under the operating mode or the standby mode. The entire series utilizes the 94V-0 flame retardant plastic case, providing the double insulation that effectively prevents electrical shock. GSM06E is approved with the international medical safety certificates.

## Model Encoding







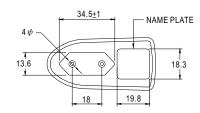
| ORDER NO.                    |   | GSM06E05-P1J  | GSM06E06-P1J | GSM06E07-P1J | GSM06E09-P1J | GSM06E12-P1J | GSM06E15-P1J | GSM06E18-P1J | GSM06E24-P1J |
|------------------------------|---|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                              | SAFETY MODEL NO.  | GSM06E05  | GSM06E06     | GSM06E07     | GSM06E09     | GSM06E12     | GSM06E15     | GSM06E18     | GSM06E24     |
| ОИТРИТ                       | DC VOLTAGE Note.2   |   | 6V           | 7.5V         | 9V           | 12V          | 15V          | 18V          | 24V          |
|                              | RATED CURRENT   | 1.2A  | 1A           | 0.8A         | 0.66A        | 0.5A         | 0.4A         | 0.33A        | 0.25A        |
|                              | CURRENT RANGE   | 0 ~ 1.2A  | 0 ~ 1A       | 0 ~ 0.8A     | 0 ~ 0.66A    | 0 ~ 0.5A     | 0 ~ 0.4A     | 0 ~ 0.33A    | 0 ~ 0.25A    |
|                              | RATED POWER   | 6W  | 6W           | 6W           | 6W           | 6W           | 6W           | 6W           | 6W           |
|                              | RIPPLE & NOISE (max.) Note.3  |   | 50mVp-p      | 80mVp-p      | 80mVp-p      | 100mVp-p     | 120mVp-p     | 150mVp-p     | 180mVp-p     |
|                              | VOLTAGE TOLERANCE Note.4  |   | ±5.0%        | ±5.0%        | ±5.0%        | ±5.0%        | ±5.0%        | ±5.0%        | ±4.0%        |
|                              |   | ±0.5%   | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        |
|                              |   | ±5.0%   | ±5.0%        | ±5.0%        | ±5.0%        | ±3.0%        | ±3.0%        | ±3.0%        | ±2.0%        |
|                              | SETUP, RISE, HOLD UP TIME   |   |              |              | _ 0.070      | _ 0.070      | _0.070       | _ 0.070      |              |
|                              | VOLTAGE RANGE   | 85 ~ 264VAC 120 ~ 370VDC  |              |              |              |              |              |              |              |
| INPUT                        | FREQUENCY RANGE   | 47 ~ 63Hz   |              |              |              |              |              |              |              |
|                              | EFFICIENCY (Typ.)   | 68%   | 74%          | 74%          | 76%          | 77%          | 79%          | 80%          | 82%          |
|                              | AC CURRENT  |   |              | 1470         | 1070         | 11 /0        | 1 5 /6       | 00 /0        | 02 /0        |
|                              | INRUSH CURRENT (max.)   | 0.18A / 100VAC  |              |              |              |              |              |              |              |
|                              | LEAKAGE CURRENT(max.)   | 30A / 230VAC  |              |              |              |              |              |              |              |
| PROTECTION                   | LEARAGE CORRENT(IIIax.)   | Touch current < 50 \( \text{A} \) 264VAC  |              |              |              |              |              |              |              |
|                              | OVERLOAD  | >105% rated output power  |              |              |              |              |              |              |              |
|                              |   | Protection type: Hiccup mode, recovers automatically after fault condition is removed |              |              |              |              |              |              |              |
|                              | OVER VOLTAGE  | 110 ~ 140% rated output power   |              |              |              |              |              |              |              |
|                              | WORKING TEMP.   | Protection type: Clamp by zener diode  0 ~ +50°C (Refer to "Derating Curve")          |              |              |              |              |              |              |              |
|                              | WORKING HUMIDITY  | 20% ~ 90% RH non-condensing   |              |              |              |              |              |              |              |
|                              | STORAGE TEMP., HUMIDITY   | -20 ~ +85°C, 10 ~ 95% RH  |              |              |              |              |              |              |              |
|                              | TEMP. COEFFICIENT   | ±0.04% /°C (0~40°C)   |              |              |              |              |              |              |              |
|                              | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes               |              |              |              |              |              |              |              |
| SAFETY &<br>EMC<br>(Note. 7) | SAFETY STANDARDS  | IEC60950-1, TUV EN60601-1, EN60601-1-11 approved                                      |              |              |              |              |              |              |              |
|                              | WITHSTAND VOLTAGE   | I/P-O/P:5656VDC   |              |              |              |              |              |              |              |
|                              | ISOLATION RESISTANCE  | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |              |              |              |              |              |              |              |
|                              | EMC EMISSION  | Compliance to EN55011, EN61000-3-2,3  |              |              |              |              |              |              |              |
|                              | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, EN60601-1-2 medical level, criteria A         |              |              |              |              |              |              |              |
| OTHERS                       | MTBF  | 500Khrs min. MIL-HDBK-217F(25°C)  |              |              |              |              |              |              |              |
|                              | DIMENSION   | 32*66*42.5mm (L*W*H)  |              |              |              |              |              |              |              |
|                              | PACKING   | 100g; 90pcs / 10Kg / CARTON   |              |              |              |              |              |              |              |
| CONNECTOR                    | PLUG  | See page 3; Other type available by customer requested                                |              |              |              |              |              |              |              |
|                              | CABLE   | See page 3; Other type available by customer requested                                |              |              |              |              |              |              |              |
| NOTE                         | 1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.  2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.  3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.  4.Tolerance: includes set up tolerance, line regulation, load regulation.  5.Line regulation is measured from low line to high line at rated load.  6.Load regulation is measured from 0% to 100% rated load.  7.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) |   |              |              |              |              |              |              |              |



# Derating Curve (%) QVO 70 0 100 20 30 40 50 AMBIENT TEMPERATURE (°C)

## Static Characteristics 100 90 80 70 60 40 85 100 110 135 155 230 264

## ■ Mechanical Specification



## ■ Plug Assignment

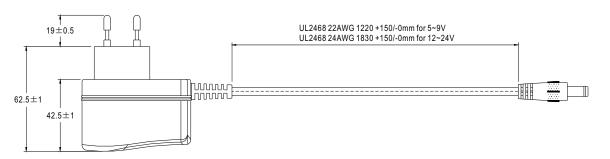
Unit:mm

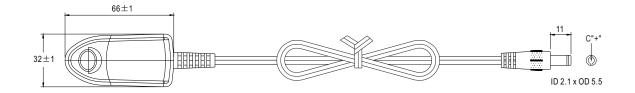
Standard plug: P1J

| P1J    |        |  |  |  |  |
|--------|--------|--|--|--|--|
| P/N    | ОИТРИТ |  |  |  |  |
| CENTER | +      |  |  |  |  |

INPUT VOLTAGE (V) 60Hz

Optional lock type plug: P2S SWITCHCRAFT S761K plug equivalent





## **■** Installation Manual

 $Please\ refer\ to: http://www.meanwell.com/webnet/search/InstallationSearch.html$